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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/762,441	02/08/2001	Masahiko Maeda	Q63016	4617

7590

12/19/2002

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EXAMINER

ZACHARIA, RAMSEY E

ART UNIT

PAPER NUMBER

1773

DATE MAILED: 12/19/2002

11

Please find below and/or attached an Office communication concerning this application or proceeding.

ASIR

Office Action Summary	Application No. 09/762,441	Applicant(s) MAEDA ET AL.	
	Examiner Ramsey Zacharia	Art Unit 1773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Priority

2. The priority document has been received from the PCT office has been placed of record in the file.

Claim Rejections - 35 USC § 103

3. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saitoh et al. (U.S. Patent 5,229,461) in view of Dessaint et al. (U.S. Patent 4,295,976).

Saitoh et al. teach a coating composition comprising a vinylidene fluoride copolymer which yields a film having excellent weatherability and stain resistance (column 1, lines 54-60). The copolymer comprises units of vinylidene fluoride (see formula I) and units having a hydroxyl functional group (formula III) (column 2, lines 17-47). The composition further comprises a curing agent, such as an isocyanate, an amino resin, or an acid anhydride, that is reactive with the hydroxyl groups in the copolymer (column 9, lines 7-29). The coating may be applied directed to the substrate or over a primer coating, such as an acrylic coating (column 11, lines 1-11).

Regarding the stain resistance limitations in claims 1 and 2, the cracking resistance limitations in claims 3 and 4, and the hydroxyl value limitation of claim 9, these are taken to

Art Unit: 1773

material properties of the coating composition. Since the coating composition of Saitoh et al. appears to be the same as that of the instant invention (especially since page 7, lines 17-19 of the instant specification cites the composition of JP-A-4-28707 as a suitable curable fluorine-containing resin and U.S. Patent 5,229,461 is an English language equivalent of JP-A-4-28707 as shown by Derwent abstract 1991-347997).

Regarding the limitations of claim 5, while Saitoh et al. is silent with respect to the weight of the coating, the coating weight of a protective coating is known to affect the degree of protection (e.g. stain resistance and weatherability). As such, it would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the weight of the coating, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2nd 272, 205 USPQ 215 (CCPA 1980).

Saitoh et al. do not teach applying the composition to leather, however, the composition is taught as being applied on substrates such as metal, wood, concrete, plastic, and the like (column 11, lines 5-8).

Dessaint et al. disclose that materials such as metals, plastics, wood materials, concrete, and leather are considered equivalent substrates for fluorinated anti-staining coatings (column 1, lines 5-11).

Dessaint et al. shows that for anti-staining fluorinated coatings metal, wood, concrete, plastic, and leather are equivalent structure substrates. Therefore, because these substrates were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art

Art Unit: 1773

would have found it obvious to substitute a leather substrate for the metal, wood, concrete, plastic, or the like material used as the substrate by Saitoh et al.

Therefore the invention of claims 1-19 would have been obvious to one of ordinary skill in the art at the time the inventions were made.

Response to Arguments

4. Applicant's arguments filed 17 October 2002 have been fully considered but they are not persuasive.

Regarding Saitoh et al., the applicants argue that the coating of Saitoh et al. is hard and has a high molecular weight as opposed to the instant coating which soft and flexible. Saitoh et al. applies their film to hard substrates (such as metal, wood, concrete, and plastic) and, as such, is not concerned with flexibility.

This is not persuasive for the following reasons. The instant specification cites the coating of JP-A-4-28707 as a concrete example of a curable resin that meets the requirements of the instant invention (see page 7, lines 17-19 of the specification). Since Saitoh et al. is an English language version of JP-A-4-28707, it can be assumed that the coating of Saitoh et al. also meets the requirements of the coating of the instant invention. Whether Saitoh et al. were attempting to formulate a coating having the physical properties recited in the instant claims is immaterial if the coating in fact does possess these properties. Since the coating of Saitoh et al. appears to be the same as that used in the instant invention and since the instant specification cites Saitoh et al. as a suitable coating, the examiner's position is that the coating of Saitoh et al. is sufficiently soft and flexible to meet the limitations recited in the instant claims.

Art Unit: 1773

Regarding Dessaint et al., the applicants argue that Dessaint et al. uses a low molecular weight telomerization product to confer flexibility and softness to their coating. As such, this reference may not be combined with the teaching of Saitoh et al. because the latter is directed to a hard coating having a high molecular weight. The applicant also notes that Dessaint et al. teach crosslinking their product as well as adding other fluorinated products, polymers, or copolymers.

This is not persuasive because the crosslinking of the telomerization product will result in a high molecular weight polymer. So the finished coating of Dessaint et al. may be a high molecular weight polymer, just like that of Saitoh et al.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 1773

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramsey Zacharia whose telephone number is (703) 305-0503.

The examiner can normally be reached on Monday through Friday from 9 to 5.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau, can be reached on (703) 308-2367. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310 for non after-final correspondences and (703) 872-9311 for after-final correspondences.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

REZ

Ramsey Zacharia

12/16/02


Paul Thibodeau
Supervisory Patent Examiner
Technology Center 1700